Slogan for 1921---Solve the Farm Problems of the Western Uplands

Northern Novelties for 1921

Some New Fruits, Ornamentals, Alfalfas, and a Table Cereal

Printed March 12, '21 Department of Horticulture, South Dakota State College of Agriculture and Mechanic Arts Brookings, S. D.

More Land Needed

A few years ago the South Dakota Legislature furnished for my experiments **the largest fruit-breeding** greenhouse in the world. This made possible the Hansen Hybrid Plums, and a long list of other fruits. But now I need more land to keep up the good work.

I need a section of high western upland, say near Pierre, where the Legislature can inspect the work at intervals. Here we could raise fruit seedlings of all kinds.

In addition to the section of upland, we need a quarter of select, extra good nursery land further south, say at Yankton; and a quarter of land as far north as possible, say at Mobridge.

This would afford opportunity for Director James W. Wilson to continue on an adequate scale the great work he is doing with the **Siberian Fat-rumped Sheep,** which I brought from Siberia in 1913, and which will be worth many millions of dollars to South Dakota.

It would also give me the needed opportunity to finish up some special selection work with the Siberian alfalfas. With the backing of the state and under my supervision, a section or two of South Dakota public land now could be utilized with great profit to the agriculture of South Dakota.

But this is only an iridescent dream because, while **South Dakota is at the head of all the States in the Union in per capita production of wealth, South Dakota stands at the very foot of the list of all the States in the Union in her appropriations for experimental agriculture.**

But next time I believe conditions will be more favorable. Let us help to make farming more certain on all the uplands of the West.

In 1919 as the first President of the Association of Official Horticulturists of the Great Plains region, I recommended the adoption of the policy of each state and province growing over a million fruit seedlings. I have about 200,000 ready for spring "all dressed up and nowhere to go"—no suitable land to plant them in, so they must be jammed into nursery rows like sardines in a can.

Will you help to get more land for this needed experimental work?

The Hansen Hybrid Plums

Originated in this Department, they are now represented by far more than a million trees in western orchards and nurseries. They are rapidly finding favor in many other states. My sand cherry hybrids, such as Opata, Sapa, Sansoto, Cheresoto, and Wachampa should be kept in bush form with many stems close to the ground. As they bear heavily on one year old wood, try to have an abundance of this wood coming on by pruning back the shoots that have borne several years. The sand cherry hybrids should not be trimmed up with a high stem as some practice with ordinary plums.

WANETA. This is the largest of all the Hansen Hybrid Plums. It is a 2-inch, 2-ounce plum, and of very strong growth in nursery. An early heavy and persistent annual bearer of delicious plums of immense size. It is a cross of the America, a large Japanese plum, with pollen of the Terry, the largest native plum. The Waneta combines in large measure the most desirable points of the native and the Japanese plums. In a visit to the 1920 Iowa State Fair at Des Moines, I noticed that Waneta and the sister variety Kahinta, were by far the largest plums on exhibition.

For spring we have only a few trees of Waneta, one year buds on native plum roots, select trees each $1.50; smaller trees, each $1.25.

Of my other new plums, a few trees, one year old on native plum roots, can be spared of Opata, Sapa, Hanska, Kaw and Kiowa, at same price as Waneta.

Plums on Sand Cherry Roots

Plums budded on the native Sand Cherry roots bear very early, dwarf the tree but not the fruit, and hence are best to grow in tubs for crossing work, or for amateur dwarf orchards.

We have a few trees, all one year old buds on Sand Cherry Stocks, of the following varieties: Waneta, Opata, Sapa, Hanska, Wachampa, Kaw, Winnipeg, Assiniboin, and Yuteca, at $1.50 each.

Can Plums be Bred True to Seed?

The following is from our 1916 spring list:

Plums True to Seed Series

"The first step in my project of breeding plums true to seed to avoid the necessity of building and grafting. T. T. Seed No. 1 is a seedling of Opata. T. T. Seed No. 2 is a seedling of Ezaptan which is of the same pedigree as Sapa. I am not sure this plan will be desirable as the trees would need to be isolated when in bloom, either by tenting the trees or by planting them far from other trees. Some of them will no doubt revert, others will come true. To complete this work, seedlings should be raised and only those saved that come true."

We have not sent out trees of this series since, but have a few trees for spring of True to Seed No. 2. I have watched this seedling closely the past five years. It is practically a Sapa in fruit, but the plant is a low bush, having much the same habit as its granddam, the native Sand Cherry. Bears freely on one year shoots in nursery, from the ground up, and annually thereafter. But probably the plant should be propagated by layers to save the expense of budding. What has been done in this seedling is really to reduce the choice black-purple flesh plum-sand cherry hybrid to the stature of a **small fruit.** They can be planted close together like currant bushes. What more can be done, the future must disclose.

A few plants of the T. T. Seed No. 2, one year old buds on native plum roots, price each. $1.00.

Pure Native Manitoba Plums

From seed of the Manitoba wild plum received many years ago from near Stonewall, north of Winnipeg. I selected two of the best and named them Winnipeg and Assiniboin. These have done well, especially far north in Canada.

A few trees of Winnipeg and Assiniboin, one year old in native plum roots, each $1.00.

Native Plum Seedlings

We can spare some one year native plum seedlings for grafting and budding, raised from our collection of seedlings, named and unnamed. Will do also for windbreaks.

Price, $6.00 per 100.

Native Plum Pits

We are often asked for pits of native plum seedlings from which to grow stocks to use for budding and grafting. We can spare some native plum pits (cleaned now and stratified for freezing in sand), at the rate of 1 pint for $1.00.

Sand Cherry Seedlings

Western Sand Cherry, **Prunus Besseyi.** A native of the highest and driest lands west of the Missouri river in this state. A dwarf bush fruit much favored by the Sioux Indians. These plants are seedlings of our third and later generations under cultivation at the South Dakota Experiment Station, hence many of the bushes bear fruit of extra size and fruit of all the seedlings is good enough for sauce.

Price, 12 one-year seedlings for $2.00; 100 for $12.00.

Ivan Crab

Offered for the first time spring 1916. One of our many seedling crabs. Noteworthy for the calyx segments being absent in the ripe fruit, the same as in the pure Siberian crab (**Pyrus baccata**). Fully one and three-fourths inch in diameter, roundish, oblate, good color, marbled with stripes and orange red, acid.

Trees one year buds on Red Siberian crab roots. Each 75 cents.

Olga Crab

Offered for the first time, spring 1919. Pedigree: Female parent, Duchess of Oldenburg apple. Male parent, Pyrus baccata cerasifera, which is much like the old Cherry crab. This combines the Russian apple with the Siberian crab. Fruit is regular, oblate, fully 1½-inch in diameter on the original seedling tree. Color solid bright cherry red all over with blue bloom; dots distinct, white, many large; basin quite shallow, smooth; cavity wide, obtuse with considerable russet. Calyx mostly deciduous. Flesh is yellowish white, crisp, juicy, acid, of good quality. Flesh is yellow with red core outline. Very good to eat raw as it mellows. The fruit cooks up very quickly, as easily as the Duchess apple itself, and the sauce is of an attractive deep salmon red. Under propagation the trees may increase slightly in size of fruit. The tree is a vigorous stocky grower with strong forks and extremely productive.

Trees, one year buds on Red Siberian crab stock, each 75 cents.

Dolgo Crab

A New Red-Jellied Siberian Crab

At the annual exhibits of this Department at the South Dakota State Fair many have asked about the remarkably long, conical, intensely bright red crabs we used for making letters. This is one I brought over from my second trip to Russia in 1897. A vigorous productive tree and so far free from blight. Fruit full of juice, jells easily, makes a rich ruby red jelly of beautiful color and excellent flavor.

The one year old trees in nursery are of strong growth with wide spreading forks and strongly shouldered limbs, indicating that they will not split down easily.

Trees one year buds on Red Siberian crab apple roots, each 75 cents.

Cathay Crab

Offered for the first time spring 1919. Cathay is the ancient name for China, referring to its native home. One of our seedlings of Pyrus ringo descended from the original importation from Russia by Professor J. L. Budd. The name as now given in Bailey's Cyclopedia of Horticulture is Pyrus prunifolia, Willd. var. Rinki. This seedling is a good representative of this species. Fruit, one and one-half inch in diameter; clear bright yellow all over with some orange blush. Calyx deciduous. Flesh clear, juicy, acid. Original tree has been very productive. The fruit cooks up as easily as Duchess making a light yellow acid sauce of good flavor. May be of value for ornamental purposes on the lawn as it is a dwarfish tree.

Trees, one year buds on Red Siberian crab stock, each 75 cents.

Red Tip Crab

Offered for the first time spring 1919. Female parent, a wild crab from Elk River, Minnesota. Male parent, Pyrus Malus Niedzwetzkyana, a small red-fleshed apple from Turkestan in the high mountains between Turkestan and China. This tree has not fruited and the pedigree does not indicate any promise as a table fruit, but the red-tipped young leaves make it an interesting tree from the ornamental standpoint.

Trees, one year buds on Pyrus baccata stock, each 75 cents.

Siberian Crabs for Apple Stock

The Siberian Crab Roots for the Apple to Prevent Root-killing and as a Semi-Dwarf Stock

In bulletin 65 of this station I urged the trial of Siberian roots to prevent root-killing which is often disastrous at the North. The experiments are still in progress. The seedlings now offered will be suitable for planting out in spring and budding in August. The seedlings offered are from Yellow Siberian, Red Siberian and mixed Pyrus baccata. Price of seedlings, 100 for $5.00.

Apples on Crab Apple Roots

Root-killing of the common apple stocks is now one great source of failure in apple culture in the prairie Northwest. It is time that definite experiments were conducted over a wide area with standard varieties of apples grown on Siberian crab roots. Such trees will be free from root-killing, will attain less size and bear earlier. This season we have no standard apples to offer, but have some choice crab apples. We wish to put these in the hands of careful people who will plant them, give good care and keep careful records. My impression of preliminary tests here at this station is that such trees may be planted close together and will no doubt be easier to spray.

Siberian Almond

Amygdalus nana L. All visitors to the college grounds in early spring are attracted by the remarkable color display of this beautiful shrub, which should be planted in every garden in the Northwest and far north into Canada. A dwarf ornamental with abundant, bright rose pink flowers, the very first of all shrubs to blomm in the spring. Good in front of other shrubs on the lawn. Grown from out importations from the dry steppes of the Semipalatinsk region of Siberia.

Small one year plants, each 50 cents.

Siberian Buckthorn

Brought by N. E. Hansen in 1913 form the dry steppe Semipalatinsk region of Siberia. The plant is hardier than the common Buckthorn; the foliage is of a brighter green and appears earlier. The Siberian Buckthorn will I believe supersede the common Buckthorn as soon as it can be propagated in quantity. The glowing green foliage and neat habit makes this a very attractive ornamental shrub for the lawn, either for hedges or as single specimens. Flowers small, white; berries black. Botanical name undetermined.

A few one year plants can be spared at 50 cents each.

A New Bush Honeysuckle

In 1913 on the dry steppes at Semipalatinsk, Siberia, I found a choice Bush Honeysuckle of tall growth with yellow or red berries. This will be hardy far north. Good for hedges, screens, or as single specimens. Offered for the first time.

A few one year plants, each 50 cents; 3 for $1.00.

Tartarian Maple

Acer tataricum. A desirable round topped dwarf maple for the lawn. Hardy and desirable.

Small one year seedlings, 3 for 50 cents.

A New Siberian Basket Willow

Offered for the first time. In the fall of 1913 in the dry steppe region of Semipalatinsk, Siberia, I walked along a small creek which had almost dried up. Stumbling I seized hold of a willow and found that the branches simply would not break. So I brought home a few cuttings. You may tie bow knots in these pliable shoots, but it appears practically impossible to break them. They ought to be good as a tie willow for nursery work or for basketry.

A few cuttings, 10 for $1.00.

Russian Silver-Leaved Willow

Offered for the first time. Some years ago I brought from Russia a silver-leaved willow under the name Salix regalis. The botanical status of this tree according to Bailey, appears to be Salix alba, var. splendens or Salix alba, var. argentea, hence a form of the white willow.

These trees have made a strong growth, are perfectly hardy, and are noteworthy for the silvery foliage. A rich silver satin on both sides.

A few cuttings can be spared at 5 for $1.00.

Manitoba Hazelnut

Ornamental as well as useful. The need is apparent of a nut bearing shrub for the open prairie. We now have the wild native hazel nut of Manitoba in the third generation under cultivation. Visitors to the college grounds have been pleased with the heavy bearing of these hazel hedges. The plants vary greatly in size of fruit and in time will no doubt approximate that of the filberts of England and France.

Can spare a few one year old plants at 2 for $1.00.

Wild Gooseberries

Offered for the first time. The native gooseberry of this region (Ribes gracile) has been carried through seven plant generations. The eighth generation is now coming on. Many thousands of seedlings have been discarded. Some interesting hybrids with the immense gooseberries of western Europe have been obtained, but these are not yet ready for distribution. Meanwhile, we can spare this year some of the pure native seedlings; bushes vigorous, very productive; thorny; fruit large, up to or even exceeding an half-inch in diameter, black, smooth, makes an excellent red sauce.

Price of gooseberry seedlings, 5 for $2.00.

Blight--the Greatest Enemy to the Pear

BREEDING PEARS IMMUNE TO BLIGHT

The experiments in breeding pears immune or resistant to blight are described in Bulletin 159 of this Station.

Most of these new hybrid Siberian pears have not fruited, but the fruit cannot be expected to be smaller than that of Pyrus **ovoidea** itself which, although only one and five-eighths inches in diameter, is sweet, juicy and of fair quality.

Last spring I visited some of the best collections of cultivated pears in Arkansas, Missouri, Iowa and Illinois, to obtain pollen for use in this great enterprise of originating hardy blight-proof pears of large size and good quality by mating the choicest pears of Europe, the largest pears in the world, with the small-fruited but hardy and blight-proof pears of Siberia.

For spring planting I have imported 15 pounds of seed from **Pyrus Ussuriensis** from one of the coldest regions of Korea. If we get a stand, there will be some seedlings to offer for spring 1922.

Tetonkaha Rose

Offered for the first time in the spring of 1912. A seedling of the wild prairie rose from Lake Tetonkaha, about eighteen miles northwest of this station, crossed with the pollen of the Siberian Rose rugosa, so that it is a combination of at least three species. In the 100 seedlings obtained from the cross, 74 were double and 26 single; all deep pink and fragant. The stock offered consists of root sprouts from these 26 original double flowered seedlings. The flowers are fully 3 inches in diameter; the bush is perfectly hardy, flowering abundantly in June; about 18 to 25 petals, deep rich pink; very fragrant; appears desirable for dwarf hedges or as an ornamental shrub. The habit is more upright and the flowers are less concealed by the foliage than in the pure Rosa rugosa. This Tetonkaha rose proves absolutely hardy and very desirable in many places. It is a very free bloomer. Plants of strong growth and as they sprout freely it should not be necessary to propagate on tender commercial stocks or from cuttings.

Small plants, one year on own roots, 75 cents each.

Rosa Rugosa

The well known beautiful hardy rose with dark crimson single flowers up to four inches in diameter. Attractive ornamental in autumn and early winter with large bright red fruits, which are used, with seeds removed, for food in its native home. Our own importation, descended from the original introduction from Siberia by the Imperial Botanical Gardens, at Petrograd, Russia. The Siberian form of this species is superior to the Japanese form.

Large plants, several years old, each $1.00.

Lavatera Thuringiaca

A tall growing perennial flower brought by N. E. Hansen in 1913 from the dry steppes of Semipalatinsk, Siberia. Height, 6 to 7 feet. Branching habit. Flowers large, pink, somewhat like single Mallows or Hollyhocks. F. L. Skinner at Dropmore in northwestern Manitoba reports this hardy and that it blooms all season.

Seeds, per packet, 50 cents.

Premiums for Small Gardens

Some of the members of the South Dakota State Horticultural Society have only small gardens and hence no opportunity to plant fruit trees or forage crops. Hence the following offer. One premium free with each annual membership.

1. Six Gladiolus bulbs from the large collection of this department, all from choice named sorts, sent by mail in time for spring planting.
2. Cut flowers in season of Gladiolus, one dollar's worth sent by mail.
3. Cut flowers in season of Chrysanthemums, one dollar's worth, sent by mail.

Hansen Siberian Muskmelon No. 3

Offered first in spring 1917. Seed obtained on my 1913 trip to the Semipalatinsk Province, Siberia. The skin yellow, flesh white, Specimen illustrated weighs 11 pounds, and was shown at the South Dakota State Fair at Huron, September, 1916. This melon is very early and productive. As tested on sandy soil in Siberia the quality was delicious. Here on the heavy black soil the quality varies, some being good, others not so good. The quality of a muskmelon depends somewhat on the soil. Those who do not like the flavor should try some sliced and fried in batter.

Price of seed, per small packet, 25 cents.

Hansen Siberian Watermelon No. 3

A smooth, round, dark green, very early watermelon with sweet red flesh. I found this in cultivation in the dry steppe region of Semipalatinsk, Siberia, in 1913. Seed grown at this station 1917. To get a sure stand from a few seeds, plant one seed each in a pot and transplant with ball of earth.

Packet of 10 seeds, 25 cents.

Hansen White Siberian Proso

The past season, 1920, this variety surely surprised us. Circumstances prevented the seeding until July 23, in a dry spell; no rain until about August first, and still it got ripe and made a good crop, although shortened in straw. I found this large white-seeded grain millet among the Kirghiz Tartars near Semipalatinsk, Siberia, in 1913, who grew it extensively as a grain for themselves and their live stock. It is the corner stone of their agriculture in this eight-inch rainfall climate, a sure crop in the driest years. For tabel recipes, see bulletin 158 of this station. A minister in Wyoming writes that the ladies of his parish tried with good results eight of these recipes, including pancakes, muffins, sour milk bread, griddle cakes, rolls and Boston brown bread. Farmers in western South Dakota have raised 300 to 310 pounds of grain from one pound of seed. A grain that will furnish good nutritious food for yourself and family and all your live stock in the driest years on the driest uplands of all our western states. A grain that at a pinch can be prepared for the table with a cheap coffee mill and sieve. The past several seasons we have grown a small lot from hand-picked seed, the aim being to eliminate for table use the few grains of other colors mixed with the original stock as it came from Siberia, and to fix the type of large, round, white, easily hulled kernels for table use. This is very slow and tedious work. If you don't believe this, try it. One pound of seed sown in the spring means usually four to five bushels in the fall.

Two pounds seed of the Hansen White Siberian Proso, grown from seed hand-picked four years in succession. Price 50 cents.

Hulling Proso

In August, 1917, the first Proso huller in America was received by the South Dakota State College from Russia. I ordered it from Russia, but owing to the submarine campaign it had to be sent via Siberia and Japan, so it was one year and seven months on the way. This machine was exhibited at the South Dakota State Fair at Huron, September, 1917. If necessary this machine may easily be duplicated, as it is not elaborately constructed as seen by the cuts shown in our spring, 1918, list. Meanwhile, for home use you can get along without the huller by using an old coffee mill or small hand grist-mill. In such cases the grain may be cleaned by sifting and pouring on a sheet in a current of air.

Cossack Alfalfa

1916 CROP, 1,000 BUSHELS SEED

The strongest and best one of these hybrid alfalfas is the one I have named Cossack, noted in bulletins 159 and 167. The Cherno Alfalfa, sister plant of the Cossack, has been consolidated with the Cossack as it is not possible to distinguish between them. The small spoonful of seed which I brought home from Russia in 1906 and named Cossack has been developed in the hands of many farmers so that the 1916 crop in the western part of South Dakota was fully One Thousand bushels. Bueyrs for the leading seedsmen ahve been busy in these fields and the seed is now being offered. Many farmers have found by their own experience that Cossack is the heaviest and best seeder of any alfalfa they have ever tested. Seedsmen are ready to handle many car loads more as soon as available. The dry seasons of 1911, 1912 and 1913 demonstrated the value of Cossack. Very favorable reports of the Cossack come from many sections, including the far northwest prairie region of Saskatchewan, Canada. We have only a few ounces of Cossack seed available for the special experimenters who wish to get their start from the original stock.

Price per small packet, 50 cents.

ALFALFA PLANTS

Owing to scarcity of labor and land we did not get to sow any seed, so we have no alfalfa plants to offer this spring.

Siberian Esparsette

A good forage plant brought by Prof. N. E. Hansen in 1913 from the dry steppes near Semipalatinsk, Siberia. This Siberian form of esparsette, an erect-growing legume, should be tested where the French esparsette is not hardy.

Seeds, per packet, 50 cents.

Semipalatinsk Alfalfa

Described in bulletin 141 and 167. From the dry steppes of Semipalatinsk, Siberia. Some of the farmers who have had excellent results with this alfalfa on the driest uplands of the west now abbreviate this word to Semi. A variety of great vigor and especially adapted to transplanting into cultivated rows. It is not at its best the first season as it first makes its remarkable root system. It does its own subsoiling on hardpan. Flowers yellow. I find this to be the strongest in growth of all the varieties of Medicago falcata.

This variety shells its seed through a long season, which is Nature's way of securing a stand in its native country with only eight inches total annual rainfall. To improve the seeding habit from the standpoint of raising seed, let the plants stand uncut and select seed from the plants that hold their seed the longest. Some will hold the seed until frost.

Price per small packet, 50 cents.

Hansen Hybrid Alfalfa No. 1

This variety was produced by transplanting the Semipalatinsk alternately with my Select Turkestan S. P. I. 20711. The latter is characterized by wonderfully tall erect habit of growth. The seed was saved of the Semipalatinsk plants and instead of producing yellow flowers, I find that the work of hybridizing is practically finished as fully 86 per cent of the plants come strongly variegated in many colors. Only 14 per cent come with yellow flowers, which is the normal color of the Semipalatinsk. This original seed was sown in 1915 at the rate of 4 pounds per acre in 18-inch drills which we found was much too thick. The crop of 1916 was 7,200 pounds of hay on 1.4 acres in one cutting. The yield was really heavier but the frequent rains prevented getting all the crop. Owing to lack of room it is deemed best to offer seed to experimenters elsewhere.

Price of seed, two ounces for 50 cents.

Hansen White-Flowered Alfalfa

While the hybrid alfalfas with the variegated flowers have shown wonderful hardiness and productiveness, it would be an advantage if they could be bred with definite outstanding characteristics by which they could be readily recognized. For example, an alfalfa with white flowers would have in its color a distinctive trade mark that would protect against misbranding and substitution in the sale of seed. This would be much the same as the Hereford cattle breeders putting a white face on their breed to serve as a trade mark. Holstein cattle are known by the black and white color, Hampshire swine are known by the white belt. Many other cases might be mentioned. In the case of alfalfa it would be difficult to keep this seed pure, even after the type is fixed, since the flowers cross-fertilize so readily. But it could be done by suitable care as to the location of seed plantations. The Cossack alfalfa exhibits strong tendency to light-colored variegation, and even to pure white flowers. For several years I have been endeavoring to select a white flowered alfalfa that would also be as hardy and productive as any of the others. Some of my correspondents report white flowers in the new alfalfas but that the colors do not come true. It is evident that careful selection must be practiced.

The variety here offered distinguishes itself by strong upright growth and productiveness both as to forage and seed. It is a beginning only. In 1916 we found that the seed came fully 70 per cent true to the white color, but the work may easily be completed. Our later selections were up to 97% white flowered. Owing to lack of room the seed is now offered to experimenters elsewhere. The seed may be sown in rows and the plants transplanted after one year's growth as described in my bulletin 167. The plants that do not come true as to white color of flowers should be removed as soon as they show off color. This variety originated as a seedling of the yellow-flowered alfalfa, Medicago falcata, from Omsk, Siberia, grown closely adjacent to the Cossack.

Offered for the first time spring 1917. Price per packet of about 100 seeds, 50 cents.

A WHITE-SEEDED, WHITE-FLOWERED ALFALFA appeared in these cultures in 1919 which we are trying to fix so it will come to seed. But this is not yet ready for distribution.

Hansen White Sweet Clover

Melilotus alba raised from seed found growing wild on the dry steppes of Semipalatinsk, Siberia, in 1913, by Prof. N. E. Hansen. Melilotus alba is the common white sweet clover which is native in Europe, North Africa and middle Asia. In Europe it is found as far north as latitude 15 degrees, 16 seconds in Norway. As found under cultivation, the exact origin of common Sweet Clover is not known. It will be of interest to ascertain the comparative value of this strain of the plant from this 8-inch rainfall climate.

At the University of Saskatchewan, Saskatoon, Saskatchewan, Canada, this Siberian Sweet Clover has been found to be of great promise as the hardiest, earliest and best of all the strains of White Sweet Clover. It may have a great bearing on the problem of adding humus to summer fallowed land. The name Arctic Sweet Clover has been suggested for this strain, but the name Hansen Siberian White Sweet Clover should be retained as it has priority and the plant is not really arctic in its range.

Price of Hansen White Sweet Clover seed, $1.00 per ounce.

Special Offer---Double Value for Your Money

LIST OF FREE PREMIUMS

Offered by the South Dakota State Horticultural Society Until April 1, 1921

The Legislature has made this Society the Department of Horticulture for South Dakota and has fixed the price of annual membership at $1.00. The reports are published by the state, but aside from the State Official List, the report is sent only to members. This provides a fund to help pay the running expenses of the Society.

The Society wishes to increase its membership.

As a free premium, select One Dollar's worth of seeds, plants or trees from the foregoing list. The order must be received before April 1, 1921. As the supply of some of these premiums is very limited mark your second choice. One of the annual reports will be sent you at once. One book and one free premium amounting to One Dollar, will be sent postpaid for each $1.00 received. Here is a good chance to get a valuable library of books on South Dakota trees, fruit and gardening, as well as some choice new fruits for the garden.

Special Notice

After April 2, 1921, the only premium available will be one of the old annual reports. This will be sent without further notice. There will be no duplication, because our card index records shows just what reports have been sent to every one who has ever been a member of the Society.

Book Premiums

In place of seed and plant premiums, the following are offered. But the offer may be withdrawn at any time without notice, so hurry up your order.

Select ONE of the following list for each annual membership:

No. 1—One back volume of the Annual Report of this Society.

No. 2—Vegetable Gardening, 246 pages, paper cover, by the late Prof. S. B. Green, University of Minnesota.

No. 3—Popular Fruit Growing, 323 pages, paper cover, by the late Prof. S. B. Green, University of Minnesota.

No. 4—Evergreens, "How I Grow Them," 95 pages, paper cover, by C. S. Harrison, and "Windbreaks and Shelter Belts,' 69 pages, paper cover, by the late Prof. S. B. Green.

SPECIAL OFFER UNTIL APRIL 1, 1921

The life membership is fixed by the Legislature at Ten Dollars. It is highly desirable that the Society has more life members as they are our permanent source of strength and influence. Residents of South Dakota who become life members may select Ten Dollars' worth of trees, plants, seeds or other premiums from this circular as a free premium. This includes a set of 17 annual reports now issued, as far as available, and one annual report as issued. All premiums sent by express at customer's expense.

Address, PROF. N. E. HANSEN,
Secretary South Dakota State Horticultural Society,
Brookings, South Dakota.

Terms

Cash with order. Positively no credit given, except to Government Experiment Stations. Add 25 cents to orders for less than $3.00 to pay for moss and packing. Stock is shipped by express carefully packed in moss.

No Orders Booked Until Paid For.

No Plants Sold in Less Than the Quantities Specified.

The money received from the sale of plants makes it possible to carry on the fruit-breeding work on a large scale than would otherwise be possible. A work of tremendous magnitude and importance is being done with very limited means; this charge helps to cover cost of propagation and also serves to keep the stock out of the hands of the careless planter who is not really interested in the work.

Do not send local checks. Remit by Bank Draft, Postoffice or Express Money Order. Address N. E. HANSEN,
Experiment Station, Brookings, South Dakota.